Application No.	Applicant(s)	
<del></del> :		
LAdillilei	Artonic	
Curtis B. Odom	2634	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
2. The allowed claim(s) is/are 10-20 and 26-40.		
3.   The drawings filed on 16 October 2000 are accepted by the Examiner.		
4.  ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some* c) ☐ None of the:  1.  ☐ Certified copies of the priority documents have been received.  2.  ☐ Certified copies of the priority documents have been received in Application No  3.  ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  1) ☐ hereto or 2) ☐ to Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
6. ☐ Interview Summary Paper No./Mail Da	(PTO-413), te	D-152)
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	ars on the cover sheet with the coor of REMAINS) CLOSED in this apport of the appropriate communication GHTS. This application is subject to and MPEP 1308.  Examiner.  der 35 U.S.C. § 119(a)-(d) or (f).  been received.  been received in Application No uments have been received in this  of this communication to file a reply ENT of this application.  Itted. Note the attached EXAMINER is reason(s) why the oath or declarate is be submitted.  on's Patent Drawing Review (PTO-Amendment / Comment or in the Comment of the drawing is the header according to 37 CFR 1.121(sit of BIOLOGICAL MATERIAL in FOR THE DEPOSIT OF BIOLOGICAL MATERIAL in FOR THE DEPOSIT OF BIOLOGICAL MATERIAL in EVENT OF BIOLOGICA	Examiner  Curtis B. Odom  2634  Art Unit  2634  Ars on the cover sheet with the correspondence address on the cover sheet with the sapplication. If not include or other appropriate communication will be mailed in due of the sapplication is subject to withdrawal from issued and MPEP 1308.  Examiner.  der 35 U.S.C. § 119(a)-(d) or (f).  been received.  been received in Application No  uments have been received in this national stage applicated of this communication to file a reply complying with the region of this application.  Ited. Note the attached EXAMINER'S AMENDMENT or Note that the season(s) why the oath or declaration is deficient.  It be submitted.  In the Office action of the submitted.  Amendment / Comment or in the Office action of the season of the season of the season of the submitted. Note the attached EXAMINER'S AMENDMENT or Note that the submitted of the submitted. The season of the season of the submitted of the submitted. The submitted of the submitted

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**EXAMINER'S STATEMENTS OF REASONS FOR ALLOWANCE** 

1. Claims 10-20 and 26-40 are allowable over prior art because related references do not

disclose a phase detector having inputs of a reference signal and a comparison signal which

generates a phase difference signal that represents a phase difference between the reference

signal and a signal having twice the frequency of the comparison signal, wherein the phase

detector comprises of a circuit that generates a comparison signal from a divided frequency

signal, wherein the comparison signal has one half the frequency of the divided frequency signal.

Conclusion

2. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The

examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Curtis Odom April 19, 2005

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